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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,832	08/08/2001	Toshifumi Togashi	2271/65666	2871

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EXAMINER

SCHLAK, DANIEL K

ART UNIT

PAPER NUMBER

3653

DATE MAILED: 12/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/924,832

Applicant(s)

TOGASHI, TOSHIFUMI

Examiner

Daniel K Schlak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-64 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the mailing or post office address of each inventor. A mailing or post office address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing or post office address should include the ZIP Code designation. The mailing or post office address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The current title describes approximately 100,000 already existing patents.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The claims are replete with instances of vague and indefinite subject matter. The following is a detailed description of those instances which the Examiner noticed outright. Please revise all of the claims to remove the following and any other such

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indefinite subject matter, as the following listing is only an example of those recitations in the claims which do not comply with 35 U.S.C. 112, 2nd Paragraph.

Claims 1-62 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 and 32 recite retracting the tilt member in parallel to an axis of the sheet feed roller? This makes absolutely no sense. The axis of the feed roller, as shown, is orthogonal to the direction of movement of retraction of the tilt member. Please define these terms more clearly and check for the actual directions being referred to.

Claims 9 and 38 recite the limitation "the sheet convey direction" in lines 8, and 9 (respectively). There is insufficient antecedent basis for this limitation in the claims.

Claims 11 and 40 recite the limitation "both sides" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. No preceding limitation has stated that there are only two sides, thus the term "both" is without any basis.

Claims 12 and 41 recite that a thin elastic member is disposed substantially at a center of the sheet feed roller. The only thing at the geometrical center of a three dimensional object is the center of that three dimensional object. In this case, the only thing at the center of the roller is the material of the roller.

Claim 13 recites the limitation "the contact area of said sheet feed roller" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites, in line 5, that the elastic member includes a "bent". A bent what? The word "bent" is an adjective.

Claim 14 recites the limitation "both sides" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim. The term "both" implies the precedent basis of two and exactly two sides, without which "both" cannot be used in proper context. Does the sheet feed roller have two "sides". It is not possible to tell from the claims.

Claims 15, 19, 44, and 48 recite that a thin elastic member is disposed substantially at a center of the sheet feed roller. The only thing at the geometrical center of a three dimensional object is the center of that three dimensional object. In this case, the only thing at the center of the roller is the material of the roller.

Claims 18 and 47 recites the limitation "both sides" in line 2 of each claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 8 and 37 recite that the plate is mounted "from" the tilt face. The word "from" is clearly inappropriate for the word "mount", which is usually and appropriately used with the modifiers "to" and "on".

Claim 42 recites, in line 6, that the elastic member includes a "bent". A bent what? The word "bent" is an adjective.

Claim 43 recites the limitation "both sides" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 51 recites the limitation "both sides" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 57 recites the limitation "both sides" in line 2. There is insufficient antecedent basis for this limitation in the claim.

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Claims 1, 30, 59, 60, 61, and 62 recite "said sheet feed roller in the shape of an edge..." A roller in the shape of an edge? How is this possible? Clearly the recitation "in the shape of an edge" would be more appropriately placed nearer the object it were describing.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-3, 5, 9, 10-21, 23, 30-32, 34, 38, 39-50, 52, 59, 60, 61, 62, 63, and 64 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,535,981 to Watanabe et al.

Applicant is specifically directed to figures 2 and 3 of Watanabe, and also column 5, which describes the lever mechanism for changing the force of on the "tilt member".

Watanabe teaches a sheet feeder for sheets stacked on a sheet material stacking member one by one from the topmost sheet for feeding each of the sheet

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materials, the feeder comprising a roller (2) and a tilt member (71) which has a tilt face (72), wherein the roller has a front end running against the tilt face, said tilt member having a contact face (top of 72, indicated by arrow 70) in contact with said sheet feed roller in the shape of an edge along an axial direction of the sheet feed roller. The tilt member, tilt face, and contact face all comprise portions which can be interpreted as "edges". The tilt member is in pressing contact with the roller for "pivotal" movement with respect thereto. Watanabe teaches means for advancing and retracting said tilt member (see column 5, lines 18-50). The length of the tilt member's contact face is less than the axial length of the feed roller. The distance between the contact faces between the roller and the tilt face and the roller and the top-most paper is approximately 2-6mm, which is clear by the proportions of figure 3.

Thin elastic member (91a) is provided downstream of the contact areas. The elastic member is lined up with the center of the roller. The thin elastic member crosses a tangential direction of the contact area, and includes a *bend* which hooks "toward" the roller at a rear end. A second elastic member (4) is shown in figure 3, which with the other elastic member (91a) are placed on "both sides" of the roller.

The elastic member crosses the tangential direction at an angle between 20 and 60 degrees – approximately 30 degrees. The elastic member is a friction member.

Watanabe teaches a pressure lever (81) having a free end in contact with the stacking member, which has a sensing lever (40) which is "coaxial" (do they have an axis? Such has not been recited in the claims anyway) with the pressure lever for pivotal movement associated with insertion-removal of a cassette having a stacking

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member, and a plurality of elastic members (any solid object is elastic to some degree) (42 and 82) disposed between the sensing lever and the pressure lever. The pressure lever is pivotally mounted in association with the sensing lever such that when an angle of the pressure lever to said sensing lever is greater than a predetermined angle.

Figures 2 and 3, and column 5, clearly teach the means for adjusting an urging force of the compression spring (78) on the tilt member.

Watanabe teaches an image forming mechanism.

Watanabe's "means for coming in pressing contact" with the roller is equivalent to that shown in at least several of the several embodiments of the instant application.

Watanabe teaches a "pressing contact" that is edge-shaped (already described) and along a line parallel to the feed roller axis. Via the apparatus disclosure, and through further description of the functioning of the device shown in figures 2 and 3, Watanabe recites the method of claims 62 and 64.

Claims 1-3, 5, 9-22, 25-32, 34, 38-51, and 54-64 rejected under 35 U.S.C. 102(b) as being anticipated by US 5,996,989 to Cahill et al.

Cahill teaches a sheet feeder for sheets stacked on a sheet material stacking member one by one from the topmost sheet for feeding each of the sheet materials, the feeder comprising a roller (24) and a tilt member (55) which has a tilt face, wherein the roller has a front end running against the tilt face, said tilt member having a contact face (indicated by arrow 56) in contact with said sheet feed roller in the shape of an edge along an axial direction of the sheet feed roller. The tilt member, tilt face, and contact

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face all comprise portions which can be interpreted as “edges”. The tilt member is in pressing contact with the roller for “pivotal” movement with respect thereto. Cahill teaches means for advancing and retracting said tilt member (see figure 3, where the Examiner has made notations referring to pertinent aspects of the drawing). The length of the tilt member’s contact face is less than the axial length of the feed roller. The distance between the contact faces between the roller and the tilt face and the roller and the top-most paper is approximately 2-6mm, which is clear by the proportions of figure 3 (particularly because the contact point between the roller and the paper will not be constant, and clearly will reside within 6mm at least some of the time.

Thin elastic member (72) is provided downstream of the contact areas. The elastic member is lined up with the center of the roller. The thin elastic member crosses a tangential direction of the contact area, and includes a *bend* which hooks “toward” the roller at a rear end (considering it is completely circular, the hook should not be hard to envision. A second elastic member (71) is shown in figure 3, which with the other elastic member are placed on “both sides” of the roller.

The elastic member crosses the tangential direction at an angle between 20 and 60 degrees – approximately 30 degrees. The elastic member is a friction member.

Cahill teaches a pressure lever (70) having a free end in contact with the stacking member, which has a sensing lever (45) which is “coaxial” (do they have an axis? Such has not been recited in the claims anyway) with the pressure lever for pivotal movement associated with insertion-removal of a cassette having a stacking member, and an elastic member (63) disposed between the sensing lever and the

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pressure lever. The pressure lever is pivotally mounted in association with the sensing lever such that when an angle of the pressure lever to said sensing lever is greater than a predetermined angle. When the sensing lever is pushed, the spring bearer acts on the spring to change the force on the tilt member.

Figure 3 clearly teaches the means for adjusting an urging force of the compression spring (57) on the tilt member.

Cahill teaches an image forming mechanism.

Cahill's "means for coming in pressing contact" with the roller is equivalent to that shown in at least several of the several embodiments of the instant application.

Cahill teaches a "pressing contact" that is edge-shaped (already described) and along a line parallel to the feed roller axis. Via the apparatus disclosure, and through further description of the functioning of the device shown in figure 3, Cahill recites the method of claims 62 and 64.

Cahill further teaches 1st and 2nd Cams (24, 26, 23). The first cam separates the stacking member from the roller. The stacking member has presser ribs. The 2nd cams (27, 26) separate the tilt member from the roller. Figure 4 gives a full description of the cams, the stacking member, the ribs, and tilt member as the interrelate to anticipate claims 25-29 and 54-58.

Claims 1, 6-8, 30, and 35-37 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,277,417 to Moritake et al.

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Moritake teaches the synthetic resin tilt member (46) and a metal plate (see fig 5) which is elastic and surrounds the tilt member on upper and lower sides. The tilt member clearly has an edge (also shown in figure 5) which runs parallel to the longitudinal axis of the roller.

Claims 1-4 and 30-33 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,318,716 to Okuda.

Okuda, in column 4, lines 62-64, discloses how the tilt member (43) with tilt face (17) in the shape of an edge is retracted from and advanced toward the roller, wherein means for advancing and retracting the tilt member comprise a rib (45a) and guide rail (shaft, 42a).

Based upon the large radius of arm (43) compared with the distance traversed by the tilt face (17), the movement is almost completely linear, against spring (44), which is equivalent to the linear distance traversed by the tilt face of the instant application.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Due to the extreme breadth of the independent claims, several other references have been cited which pose additional anticipatory rejections of the independent claims. Whatever the Applicant considers to be the patentable feature of this huge amount of

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claimed subject matter clearly has not been put forth in a clear and concise manner, as so many references anticipate so many of the claims in so many different ways.

As the Examiner cannot tell exactly what the Applicant considers novel over the art, he is unable to offer any suggestions for insertions via amendment that might make the claims allowable. Clearly there are differences between the art and the instant application. However, they have not been clearly recited in a way that would patentably define over said art.

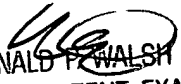
Please review the cited art prior to response.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel K Schlak whose telephone number is 703-305-0885. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on 703-306 - 4173. The fax phone numbers for the organization where this application or proceeding is assigned are 703-306-4195 for regular communications and 703-306-4195 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308 - 1113.

dk
December 16, 2002


DONALD P. WALSH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

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